

EPSCoR Programmatic UpdatesWinter 2017 PD/PA/EOD Meeting

Timothy VanReken, Ph.D. Program Director, NSF EPSCoR tvanreke@nsf.gov 703-292-7378

Order of Topics



- RII Track-2: Focused EPSCoR Collaborations
- RII Track-4: EPSCoR Research Fellows
- RII Track-1 Reporting Update
- RII Track-1 Site Visit Update



RII Track-2: Focused EPSCoR Collaborations

Update and Outlook

Motivation for RII Track-2



- Response to reports from National Academy of Sciences, and *EPSCoR 2020* and *EPSCoR 2030* workshops calling for mechanism(s) to facilitate multi-jurisdictional collaborations.
- Combining expertise distributed in different EPSCoR jurisdictions into a "critical mass" capable of competing for large scale competitions at NSF or other agencies.
- Promoting productive, <u>balanced</u> collaborations that are capable of sustained activities beyond the award period.
- Additional objectives:
 - Development of diverse early-career faculty
 - Building capacity in NSF-wide priority areas

FY 2015/2016 Competition Summary



- Reviewed 113 total proposals (57 in FY15, 56 in FY16).
 - <u>All</u> eligible jurisdictions participated in at least one proposal.
- 19 awards (8 in FY15, 11 in FY16)
 - Funding rate: 17%

- <u>20</u> different jurisdictions and <u>46</u> different institutions have been participants on at least one award.
 - Diverse with respect to geography and institution type

FY 2016 RII Track-2 Awardees: Sustainable Food, Energy, and Water Systems



Project Title	Principal Investigator	Jurisdictions
Emergent Polymer Sensing Technologies for Gulf Coast Water Quality Monitoring	Jason Azoulay, Univ. of Southern Mississippi	MS, AL
Assembling Successful Structures: Lignin Beads for Sustainability of Food, Energy, and Water Systems	Darin Boldor, LSU Agricultural Center	LA, KY
Center for a Sustainable Water, Energy, and Food Nexus (SusWEF)	Nelson Cardona-Martinez, Univ. of Puerto Rico – Mayaguez	PR, SC
Collaborative Research and Education on Synergized Transformational Solar Chemical Looping and Photo- Ultrasonic Renewable Biomass Refinery	Jerzy Leszczynski, Jackson State Univ.	MS, DE, WY
Improving Water Management, Treatment and Recovery in Oil and Gas Production	Edward Peltier, Univ. of Kansas	KS, WV
Sustainable Socio-economic, Ecological, and Technological Scenarios for Achieving Global Climate Stabilization through Negative CO2 Emission Policies	Paul Stoy, Montana State Univ.	MT, SD, WY
Sensing and Educating the Nexus to Sustain Ecosystems (SENSE). A Kentucky-West Virginia Partnership	David White, Murray State Univ.	KY, WV

FY 2016 RII Track-2 Awardees: Understanding the Brain



Project Title	Principal Investigator	Jurisdictions
The Creation of Next-Generation Tools for Neuroscience - Noninvasive Radioluminescence Approaches to Optogenetics	Stephen Foulger, Clemson Univ.	SC, AL, NM
Probing and Understanding the Brain: Micro and Macro Dynamics of Seizure and Memory Networks	Leonidas Iasemidis, Louisiana Tech Univ.	LA, AR, AL
Neural Networks Underlying the Integration of Knowledge and Perception	Jared Medina, Univ. of Delaware	DE, NV, NE
Neural Basis of Attention	Peter Tse, Dartmouth College	NH, MT, RI, NV

FY 2017 RII Track-2 Status



- Research Focus Area: **Genome to Phenome**
 - Aligned with one of the NSF "Big Ideas" Understanding the Rules of Life: Predicting Phenotype.
 - Implications for medicine, agriculture, biotechnology, ecology, evolution, etc.
 - Seeking innovative, inter-disciplinary approaches toward quantitative, predictive understanding of the complex interactions between genome and environment that generate variable phenotypic traits.
 - Proposals may use <u>any</u> combination of experimental, computational, and/or theoretical approaches with <u>any</u> appropriate model system(s).
- Continued emphasis on:
 - Inter-jurisdictional collaboration; and
 - Recruiting and development of diverse early-career faculty
- LOIs received January 10, 2017, Proposals due February 10, 2017.
- Decisions expected by August.

RII Track-2: FEC Outlook



- No major changes to solicitation release or LOI/proposal deadlines.
 - Always hopeful that solicitation release will be slightly earlier, and deadlines slightly later to allow more time for proposal preparation.
- Research Focus Area is likely to be <u>continued</u> for a second year.
- Minor changes to submission eligibility and proposal requirements are possible.



RII Track-4: EPSCoR Research Fellows

Motivation for RII Track-4



- Majority of RII resources go toward large, center-like projects.
- Additional investments in individuals or small teams through co-funding mechanism.
- Recognition that more could be done to catalyze the career trajectories for a new generation of research leaders.
 - <u>Time</u> to develop new or strengthen current research directions.
 - Opportunity to build <u>deep research connections</u> with partners nationwide.
- Vision received positive feedback during May 2015 PD/PA meeting.

Track-4 Vision



- Provides opportunities for <u>non-tenured</u> investigators to further develop their individual research potential through <u>extended</u> <u>collaborative visits</u> to the nation's premier <u>private</u>, <u>governmental</u>, <u>or academic research centers</u>.
- Fellows will be able to learn new techniques, benefit from access to state-of-the-art equipment and facilities, and shift their research toward transformative new directions.
- Experience gained through the fellowship is <u>intended to provide a foundation</u> for research collaborations that will span the recipient's career. These benefits to the Fellows are <u>also expected to in turn enhance the research capacities of their institutions and jurisdictions</u>.
- <u>Any research topic</u> within NSF's traditional portfolio will be considered for support.

Track-4 Eligibility

- PIs must have their primary appointment at an eligible institution.
- PIs must hold a non-tenured faculty appointment, or its close equivalent.
 - Pre-tenure tenure-track position (i.e., an Assistant Professor)
 - Long-term non-tenure-track position (typically Research Professors)
 - Critical date for tenure status is the proposal deadline February 28, 2017.
 - Persons holding transitional (< 3 years) fixed-term postdoctoral appointments are <u>not</u> eligible for this program.
- Hard limit of <u>three</u> proposal submissions per eligible institution

Fellowship Details



- Fellowship provides support for the fellow to spend an extended period to conduct research at an identified host site.
 - Up to six months of salary support;
 - Travel between host site and home institution;
 - Living expenses at the host site (up to six months);
 - Multiple visits are okay, but total supported time may not exceed six months.
- Host sites may be any research institution within the United States or its territories/possessions.
 - Must identify a <u>single</u> host site;
 - Does <u>not</u> need to be in an EPSCoR jurisdiction;
 - Generally expected to be outside of PI's home jurisdiction and beyond easy commuting distance.

Fellowship Details (cont.)



- If needed, funds may also be requested to bring a trainee-level researcher along for the fellowship visit:
 - Typically a student or postdoc already working in the PI's group;
 - Salary support (up to six months);
 - Travel between host site and home institution;
 - Living expenses at the host site (up to six months).
- Additional support will be allowed for direct costs associated with the work to be completed at the host site:
 - supplies, shipping equipment, publication costs, etc.
- No support is available for the host site.
 - Exception: living expenses if you reside on the host site campus during visit.
- <u>NOT</u> easily transferrable If the PI takes a new position in a non-EPSCoR jurisdiction, the fellowship award will likely be terminated.

Budget Details

- NSF
- Proposals may be for up to 24 months. Total funds requested may not exceed \$300,000.
 - Two-year duration is to provide flexibility in planning fellowship visit logistics; visits not expected to last that long.
 - Requested NSF support should be consistent with the project's proposed scope and activities.
 - Due to limits below, it is expected that most proposals will fall below the overall cap.
- Budgets may include up to six months of salary and fringe benefit support for the PI and one additional trainee-level participant.
 - Support may be for academic, calendar, or summer months.
 - Tuition for trainee may be included if appropriate.

Budget Details (cont.)

- Travel expenses for the PI and trainee-level researcher:
 - Solely for travel between the PI's home institution and the host site.
 - Multiple trips between the two sites are allowed, however the budget for travel expenses may not exceed \$20,000 total.
- Living expenses for the PI and trainee-level researcher during time spent at the host site:
 - Living expense charges (Lodging, Meals, and Incidental Expenses) may not exceed the *per diem* rates set by the United States General Services Administration (GSA) for the host site location.
 - The total budget for living expenses may not exceed \$50,000.
- Up to \$10,000 in additional direct costs are allowed.
- Host institutions are not eligible to receive funds under this award. (Sole exception is for living expenses.)

Required Letters

At least one letter is required in each of these three categories:

- 1. From the appropriate supervisory administrator at the PI's home institution.
 - Typically this would be the Department Chair or Dean for a faculty member at an academic institution.
 - To confirm the administrator's support of the PI's plans and particularly to verify that the PI will receive release time from other academic duties to complete the project as proposed.
 - If there is ambiguity about PI's status at the home institution, this letter should also provide clarification.
- 2. From the identified primary research collaborator(s) at the host site.
 - To confirm support of the proposed collaborative research activities.
- 3. From the appropriate administrative managers at the host institution.
 - To confirm that all necessary logistical arrangements (site access, office space, cyber connectivity) will be made for the PI's and trainee's potential visit(s) to ensure that the project may proceed as proposed.

NO Letters outside of these categories will be allowed!!

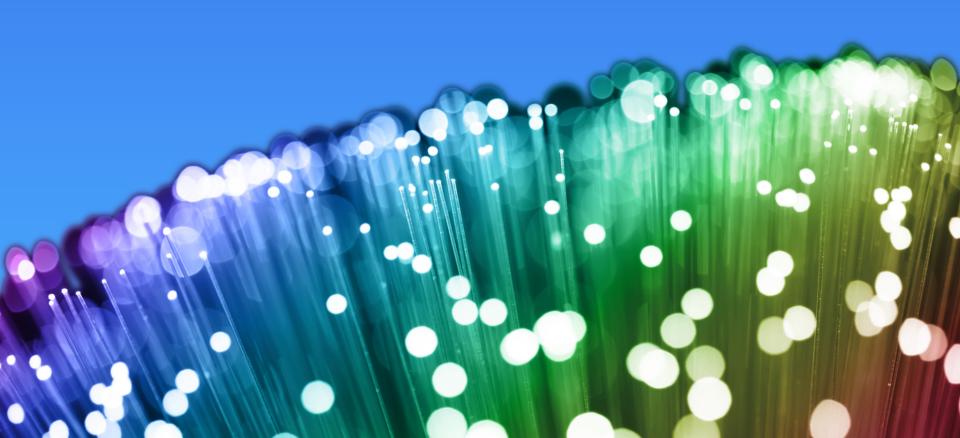
Merit Review



- Intellectual Merit
- Broader Impacts
- Additional Criteria (Solicitation-Specific):
 - Does the proposal provide clear specifications of research goals, performance metrics, and a project timetable?
 - Does the proposal make a compelling case for how the PI will benefit as a result of the fellowship both during the period of the award and beyond?
 - Does the proposal provide clear evidence that the home institution is supportive of the effort and that there are identifiable benefits to the home institution and/or jurisdiction?
 - Does the host site commit appropriate resources, both scientific and logistic, to lend confidence that the fellowship project will be successful?



Questions?





RII Track-1 Reporting

Reporting Topics



- Approval of RPPR Exemption for RII
- Updated Guidance on RII Track-1 Annual Reports
- NSF's Public Access Repository
- NSF Impacts (replaces Highlights)

Flashback to May 2016 PD/PA Meeting





OMB-Approved EPSCoR RII Reporting Process



- Covers all RII tracks at NSF EPSCoR's discretion.
 - Intent is to roll out for Track-1 and Track-2 awards in FY 17.
 - Written guidance will be distributed to PDs/PAs and Track-2 PIs soon.
 - No immediate plans to implement for Track-3 or Track-4.
- Approval is valid until January 31, 2020.

Preparing your Annual/Final Reports



- Deadlines for reports are unchanged:
 - Annual reports are <u>DUE</u> 90 days before the anniversary date of your award. Processing of reports takes 4-6 weeks typically, <u>beginning</u> when all <u>materials are received</u>. No award increments will be made until we are satisfied with the report.
 - We will **not** accelerate our process to offset a late report submission.
- Required reporting components:
 - Narrative report detailing activities for the reporting period (PDF file);
 - "Products" and "Participants/Organizations" (within RPPR);
 - Tables A-H (no changes);
 - External Evaluator's report and project response;
 - NSF Impacts (*formerly Highlights*).

General Guidance on Narrative Report



- Primary purpose is to provide a <u>clear</u>, <u>specific</u>, and <u>succinct</u> <u>summary</u> of the progress achieved during the <u>current reporting</u> <u>period</u>, as well as the current status of the project with respect to its overall goals and objectives.
- <u>Must</u> be a coherent and carefully edited narrative, <u>not</u> an amalgamated "copy and paste" document.
- Report should refrain from lengthy justification of the project's value and importance and should avoid general statements that are unsupported by specific evidence.
- Specific and detailed descriptions of results should be included, but jargon should be avoided as much as possible
- Whenever available and appropriate, quantitative data should be included.
- * **Note:** No page limits initially, will reconsider after first year.

Expected Format for Narrative Report



Heading

- Award number and title, awardee institution, PI, etc.

Overview

- Vision, mission, and goals of project, in the context of the disciplinary field(s);
- Participating institutions and their specific roles;
- Brief summary of key accomplishments during reporting period (both Intellectual Merit and Broader Impacts);
- Any significant problems, novel opportunities, and/or changes in strategy.

Expected Format for Narrative Report (cont.)



Research and Education Program

- Organized by the project's major thrust areas, as in the strategic plan;
- Major accomplishments and research findings and their significance;
- Problems, unexpected results, and novel opportunities;
- Integration of research and education throughout the project (engagement of students, postdocs, and early-career faculty);
- Identify principal researchers and institutions for each major accomplishment, as well as significant collaborations;
- Include figures and tables as appropriate to support your narrative.

Expected Format for Narrative Report (cont.)



Project Elements

- Progress and achievements for each of the project elements specified in the solicitation for your award year (Workforce Development, etc.);
- Similar format and level of detail to Research and Education section;
- Tabular/Graphical Representation of Progress to Date
 - Show progress to date relative to ALL the goals and objectives as stated in the strategic plan;
 - Indicate milestones and outcomes with an easily interpretable representation of progress;
 - Cross reference with narrative text as appropriate;
- Special Conditions (PTCs, RSV/SV recommendations, etc.)

The NSF Public Access Repository (NSF-PAR)



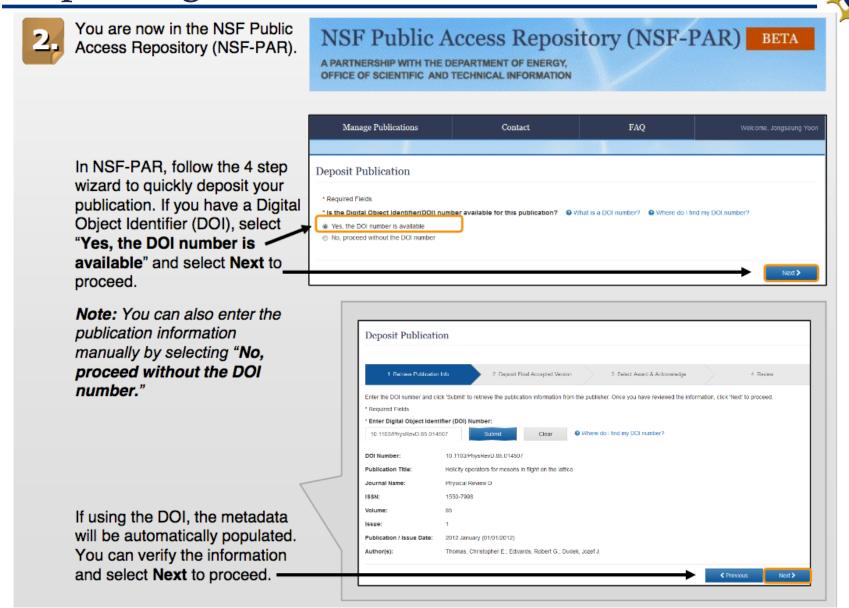
- NSF-PAR is the designated repository where NSFfunded investigators <u>must</u> deposit published journal articles and conference papers in order to meet the Public Access deposit requirement.
- PIs are required to deposit publications for awards that began after January 25, 2016.
 - EPSCoR awardees are strongly encouraged to deposit publications for their current awards regardless of start date.
- Straightforward process to deposit.
- Product will auto-populate into your award annual report.
 - (Possibly only for awards starting after 1/25/2016?)

Depositing Publications to NSF-PAR





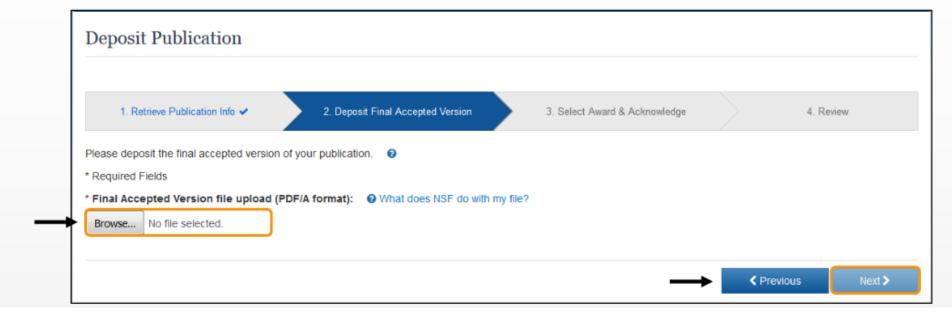
Due (1) | Overdue (0) | Submitted (0) | Not Yet Due (0)





3,

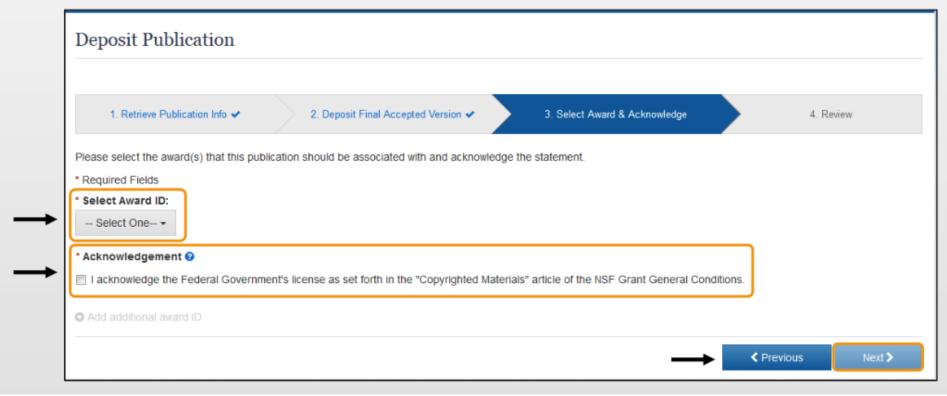
Upload the Final Accepted Version of the manuscript (must be in PDF/A format) by selecting the **Browse** button and navigating to the appropriate file location. Once uploaded, select **Next** to proceed.







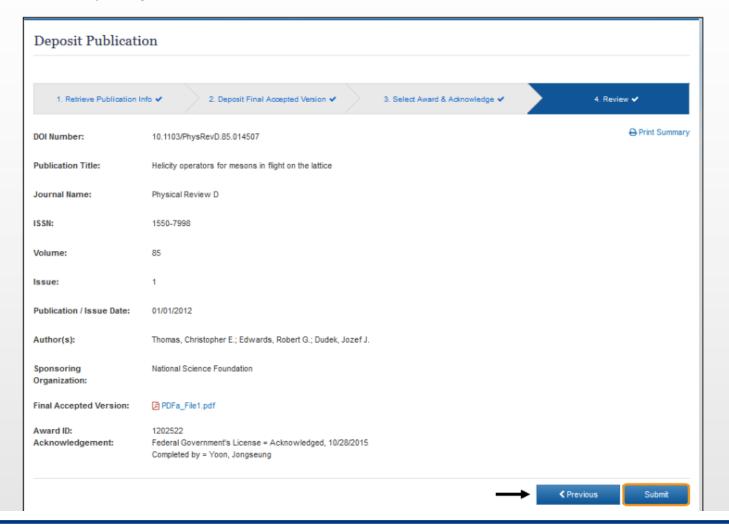
Select the Award that the publication should be associated with and check the box to acknowledge the statement. Select **Next** to proceed.







Review the publication information and select **Submit** to complete your deposit. Please note: It may take up to 6 hours for the publication to appear in your project report and be visible in the NSF Public Access Repository.



NSF Impacts



- Introduced by NSF in September 2016 to replace Highlights.
- Required information:
 - Category (Security, Economy, or Knowledge)
 - NSF Award Number
 - Explanation of the compelling nature of the impact
 - NSF Directorate & Division (OD/OIA/EPS)
 - State(s)
- Image and Copyright Release Form will be as before.
- Written guidance and a template for submitting the required information was sent to the PD/PA list on October 4, 2016.
 - Please follow the template provided!!

What Makes a Good Impact? (NSF guidance)



A strong NSF Impact provides a measurable contribution to the economy, the nation's security or knowledge that will help sustain the U.S. as a global leader. Impacts align with NSF's messaging: NSF is vital because we support basic research and people to create knowledge that transforms our future. This support:

- *Is a primary driver of the U.S. economy;*
- Enhances our nation's security; and/or
- Advances our knowledge to sustain global leadership.

The impact should give enough detail to answer the questions

So what? Why does this matter?

Additional Benchmarks to Decide on Impacts

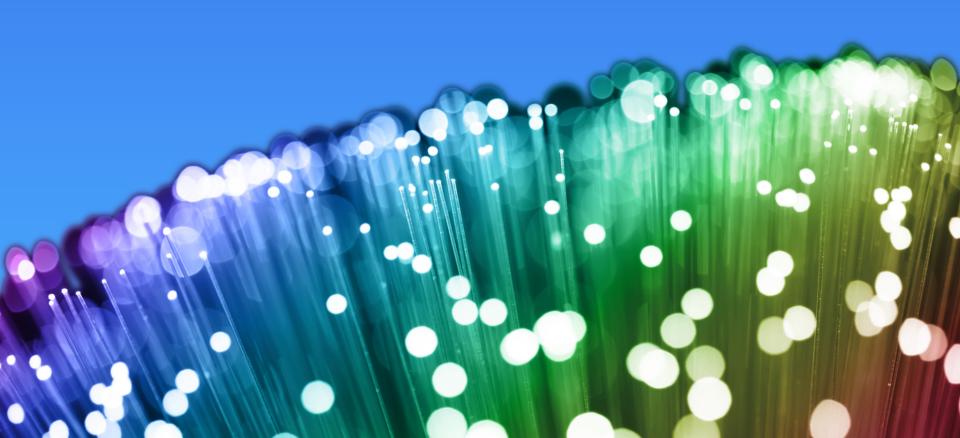
- **Relevance**: Does impact describe an outcome with already realized or potential societal benefits or an outcome that advances the field? Is the outcome something your neighbor might be excited to hear about? Or something that would grab the attention of lots of your colleagues?
- **Currency**: Is the impact related to a topic that is currently in the news? Examples in 2015 would be extreme weather, Ebola, internet security. Or, does the highlight relate to a hot topic in the field?
- **Breadth**: Does the outcome pertain to lots of people? Whole industries or populations?
- **Prominence**: Does the impact pertain to someone or some entity that is well-known?
- **Surprise**: Is the outcome unique or a game-changer in the field? Does the impact describe outcomes that seem counter-intuitive? Was the outcome the result of following a nontraditional path?

• Steer clear of topics that:

- Describe research-in-progress or iterative results;
- Profile individual people;
- Summarize workshops or conferences; or
- Detail a newly published paper, **unless** the details of the paper suggest a potentially transformative breakthrough.



Questions?





RII Track-1 Site Visits

Observations and Outlook

Site Visit Goals



• Site Visits (SVs) are a key component of post-award management and oversight of Cooperative Agreements

- Assess progress relative to project goals
 - Panelists review all aspects of the project
 - Focus on progress, impacts, value added, and sustainability
- Provide feedback to maximize project success
 - SV Panel's Report
 - Recommendations by managing NSF Program Officer (PO)

Observations from Last Year



- Conducted Site Visits (SVs) for five RII Track-1 projects during September 2016.
 - All projects in Year 4 of their award.
- Feedback has been generally positive from teams, panels, and NSF staff.
- We appreciated the hard work and dedication on the part of the project teams that allowed these meetings to run smoothly. Thank you!

A Chance to Highlight Your Impacts



- Your proposal & strategic plan represent a vision for your project that NSF supports. The SV is an assessment of <u>your progress toward that vision</u>.
- Don't be afraid to go deep!
 - Show the impact you're having, how your vision is being realized;
 - It is more effective to thoroughly describe progress on a subset of objectives rather than to try to cover every activity.
- Depend on your written materials for breadth, and always be prepared to discuss!
 - Quality of previous year's annual report is a key document for the panel in their overall review of your progress.

A Few Thoughts Going Forward



- Site Visit period should focus on the current RII Track-1 efforts <u>only</u>.
 - During the formal presentations <u>and</u> during the tours, posters, and discussion sessions.
 - Yes, there is leveraging, but please draw clear lines between what is supported with this award versus other projects. <u>Avoid</u> <u>intermingling</u>.
- Participants at the Leadership/Management level need to be present throughout.
 - Includes Research Area Leads and EOD Activity Leads
 - Both days!

A Few Thoughts Going Forward (cont.)



- A common refrain: "Why don't we already know about this?"
 - Speaks positively to the value of what you're achieving;
 - But, it also suggests that you're having difficulty making the connections needed to become national and global leaders.
- Rely on NSF to guide your planning.
 - Written guidance is paramount, supported by discussions with NSF staff;
 - Consultation with other project teams has value, but be aware that our guidance evolves each year. (*cf.* above).



Thank you!

